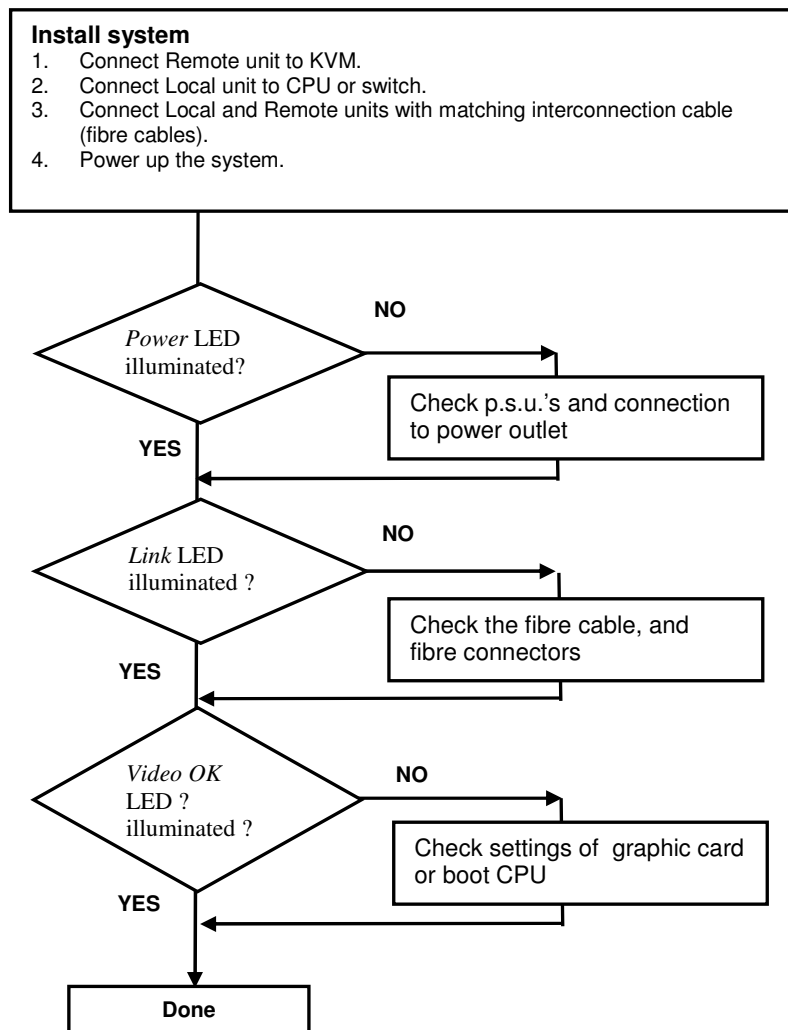


## 1 Quick Setup

This section briefly describes how to install your KVM extender system. Unless you are an experienced user, we recommend that you follow the full procedures described in the rest of this manual. You can download the manual on: [http://www.ihse.de/pdf/b456-xx\\_e.pdf](http://www.ihse.de/pdf/b456-xx_e.pdf).



## 2 Installation

For first-time users, we recommend that you carry out a test placement, confined to a single room, before commencing full installation. This will allow you to identify and solve any cabling problems, and experiment with the KVM extender system more conveniently.

### 2.1 Package Contents

**You should receive the following items in your extender package (all types):**

- DVXi/LC KVM-Extender- pair (Local Unit + Remote Unit)
- 2x 5V DC universal power supply for the DVXi/LC - Extender
- 2x German type power cord
- User manual (Quick Setup)

**K456-1W, K456-2W, K457-1W und K457-2W (additionally):**

- DVI combi- connecting cable 1,8m (DVI-I male to DVI-I male, 2x PS2 male)
- PS2-keyboard-/ mouse adapter for the connection to the local Unit

**K456-1U, K456-2U, K457-1U und K457-2U (additionally):**

- DVI-I (1,8m) video cable (DVI-I dual link male-to-male)
- USB (1,8m) cable (USB type A to type B)

**K456-2W, K456-2U, K457-2W K457-2U (additionally):**

- DVI-I (1,8m) video cable (DVI-I dual link male-to-male)

If anything is missing, please contact our Technical Support.

manual: [http://www.ihse.de/pdf/b456-xx\\_e.pdf](http://www.ihse.de/pdf/b456-xx_e.pdf)

### 2.2 System Setup

To install your DVXi/LC – Extender system:

1. Switch off all devices.
2. Connect your keyboard, monitor(s) and mouse to the Remote unit (depending on device type). Please ensure, not to swap Mouse- and Keyboard connector. The Keyboard connector is purple and the Mouse connector is green.
3. Using the supplied CPU KVM cable(s), connect the keyboard, monitor(s) and mouse connectors on the computer (or KVM switch). Please ensure, not to swap Mouse- and Keyboard connector. The Keyboard connector is purple and the Mouse connector is green.
4. Connect the 5V power supply to power the unit.



**Only use the power supply originally supplied with this equipment or a manufacturer-approved replacement.**

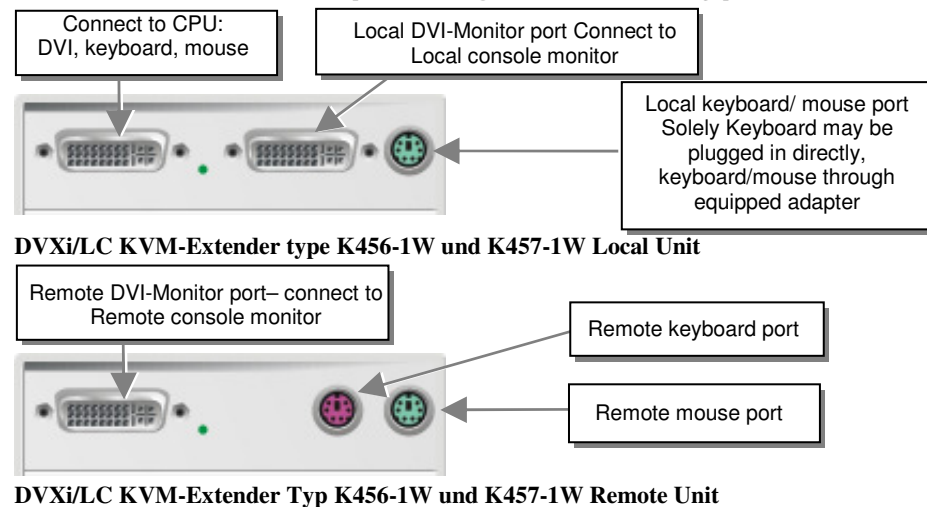
5. For a dual access system, connect the keyboard, mouse and monitor for the Local console to the appropriate ports on the Local unit. The ports may also be used to feed into a KVM switch. To the local (PS2-) Keyboard-/ Mouse port you can attach a Keyboard directly or Mouse/ Keyboard together, using the delivered adapter.
6. Connect the interconnect cable (fibre cable) to the local and the remote unit.
7. Power up the system.

### 2.3 Interconnection Cable Requirements

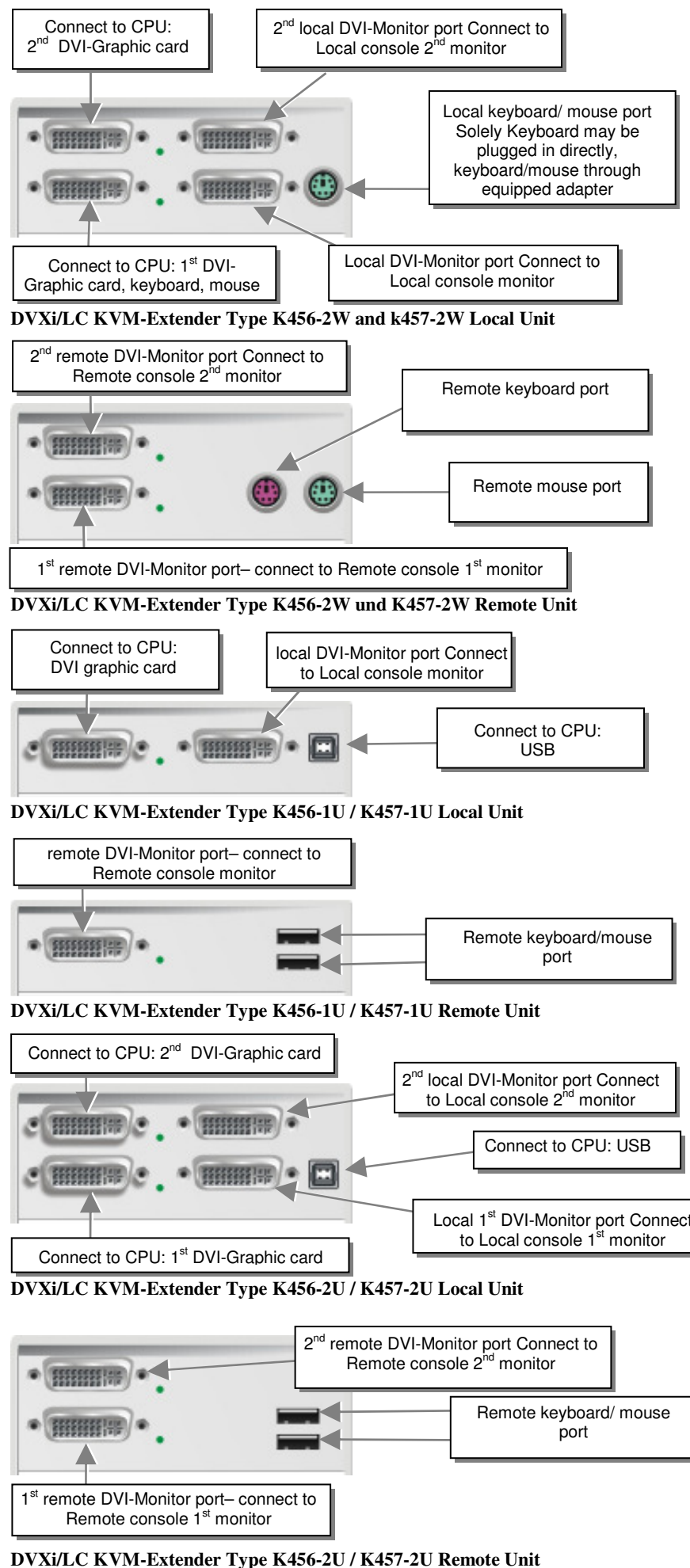
To connect the Local and Remote units you will need:

- **DVI, PS2-Keyboard, PS2-Mouse:** Connect the supplied KVM CPU cable set to your CPU (KVM.- Switch, etc.). Please ensure that the connection is tension-free! Devices K456-1W, K456-2W, K457-1W + K457-2W
  - **DVI, USB-Keyboard, USB-Mouse:** Connect the supplied DVI-I cable (DVI-I to DVI-I) and the USB-cable (USB-A to USB-B) to your CPU. Please ensure that the connection is tension-free! Devices K456-1U, K456-2U, K457-1U + K457-2U
  - **DVI:** Connect the supplied DVI CPU cable set to your CPU (KVM.- Switch, etc.). Please ensure that the connection is tension-free! Devices K456-2W, K456-2U, K457-2W und K457-2U
  - **Fibre Cables:**
    - **Multimode:** Two fibers 50µm or 62.5µm. E.g. I-V(ZN)H 2G50 (In house patch cable) or I-V(ZN)HH 2G62,5 (In house Breakout cable) or I/AD(ZN)H 4G50 (in house OR outdoor Breakout cable, stress resistant) or A/DQ(ZN)B2Y 4G62,5 (outdoor cable, stress resistant with protection against animal biting) All notations acc. VDE specification.
    - **Singlemode:** Two fibers 9µm. E.g. I-V (ZN)H 2E9 (In house patch cable) or I-V(ZN)HH 2E9 (In house Breakout cable) or I/AD(ZN)H 4E9 (in house OR outdoor Breakout cable, stress resistant) or A/DQ(ZN)B2Y 4G9 (outdoor cable, stress resistant with protection against animal biting) All notations acc. VDE specification.
- A point to point connection is required. Having one or more patch panels in the line is possible and allowed. Not allowed is a connection from the fibre link interface to any other products, especially telecommunications or network equipment.*
- **Power Supply**  
Connect the supplied 5V/DC power supplies to the **Plug** terminal on the rear of both Local and Remote units.

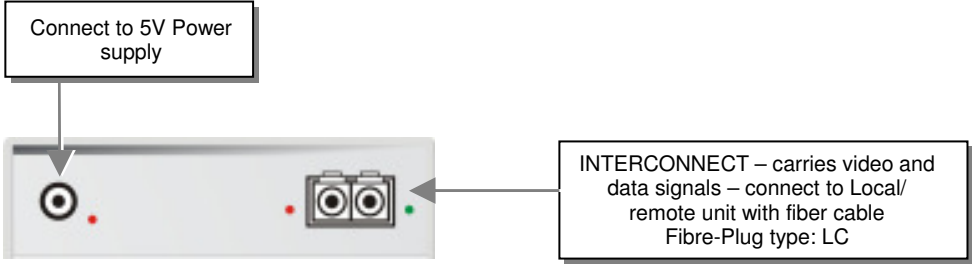
### 3 Device view (depending on device type)



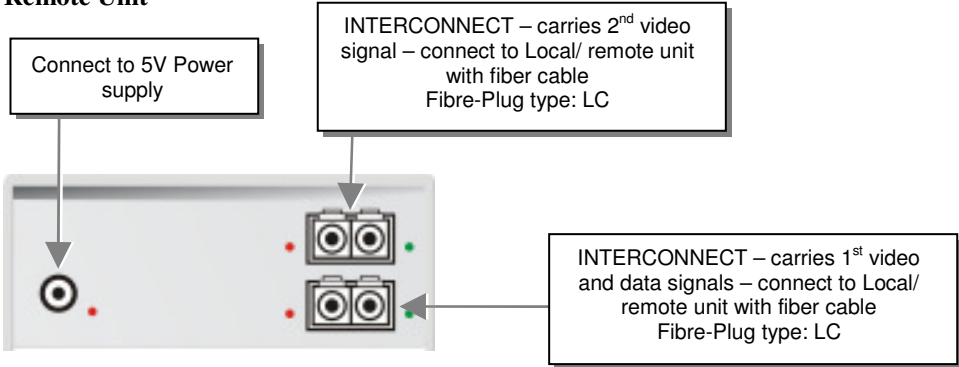
manual: [http://www.ihse.de/pdf/b456-xx\\_e.pdf](http://www.ihse.de/pdf/b456-xx_e.pdf)



manual: [http://www.ihse.de/pdf/b456-xx\\_e.pdf](http://www.ihse.de/pdf/b456-xx_e.pdf)



DVXi/LC KVM-Extender Type K456-1W, K456-1U, K457-1W and K457-1U Local/Remote Unit

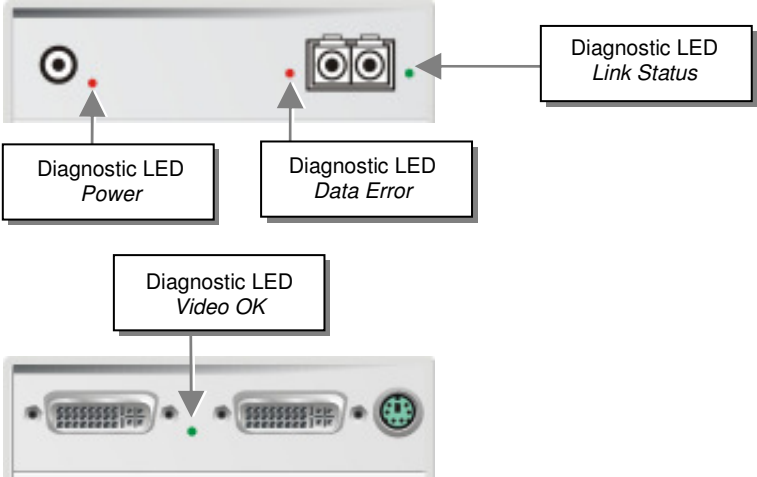


DVXi/LC KVM-Extender Type K456-2W, K456-2U, K457-2W and K457-2U Local/Remote Unit

### 3.1 Diagnostic LEDs

Each DVXi/LC KVM-Extender is fitted with four indicator LEDs: *Power*, *Video OK*, *Data Error*, *Link Status*: The *Power* LEDs are next to the Power socket.

The location of the LEDs is shown below:



Diagnostic - LEDs at DVXi/LC - Extender

LED	Appearance	Diagnostics
<b>Power LED</b> (Red LED)	Off On	Device not ready Device ready
<b>Video Okay</b> (Green LED)	Off On	No or invalid video signal detected Device ready
<b>Link Status</b> (Green LED)	blinking On	No CAT5 connection Device ready
<b>Data Error</b> (Red LED)	Off blinking / On	Device ready Errors through data transmission over fiber Cable (Cable too long, too high attenuation or too much EMI interferences )

## 4 Troubleshooting

### Monitor

*There isn't a picture.*

Check the power supply connection at the Local and Remote unit. Is the *Power* (Red LED) at the Local and Remote unit illuminated? If not, the internal power-supply may be damaged or there may be an internal error.

Check that the Interconnection cable is connected at the Local Unit and the Remote Unit. Is the *Link Status* LED illuminated? If not, there may be a problem with the Interconnection cable:

Are there Errors through data transmission over fibre Cable (Cable too long, too high attenuation or too much EMI interferences )? Is the *Data Error* LED illuminated or blinking? If yes, check cable length and environment.

*Video Okay* LED is dark: CPU does not provide a video signal – Check settings of the graphic card. Try out, connecting a monitor to the local output, to see, whether there is a signal or not.

### Keyboard

*The PC boots fine with no error messages but the keyboard does not work at all*

Wrong cable plugged in, keyboard and mouse cables reversed.

Try a different model of keyboard. If the new keyboard works then original one may be incompatible

Check that the Interconnection cable is connected at the Local Unit and the Remote Unit. Is the *Link Status* LED illuminated?

The other console is active. Gain control by any keyboard action or by pressing left and right mouse buttons simultaneously.

### PS2-Mouse

*A mouse cursor appears on the screen, but the mouse does not work*

Wrong cable plugged in, keyboard and mouse cables reversed.

Try a different model of mouse

You have connected the Local unit while the CPU was running. Therefore you have connected first the keyboard cable and then the mouse cable. Disconnect the keyboard cable and connect it again. Please reboot you CPU if the mouse is still not running.

*The system does not detect a PS/2 mouse, or the application cannot find the mouse.*

Wrong cable plugged in, keyboard and mouse cables reversed.

Ensure that the Local Unit is connected to the PC keyboard port to provide power.

### USB-Keyboard/USB-Mouse

*Your USB-keyboard/USB-mouse does not work*

Although we tried to design the devices as transparent as possible, we can't ensure that all devices are running. Please check in the manual the list of the tested devices.

### USB-HID devices

*Your USB-HID device does not work*

Although our interface supports HID devices, we can't ensure that every connected device is running. In case of a malfunction please contact our technical support.

### Other USB-devices

*Your USB- device does not work*

You have connected a non-HID device. There are supported HID devices only. All other devices are dismissed

# DVXi/LC-xM /-xS DVI-KVM-Extender

Type:  
K456-1W  
K456-1U  
K456-2W  
K456-2U  
K457-1W  
K457-1U  
K457-2W  
K457-2U

(Quick Setup)